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(12) United States Patent

Tolstihin et al.

(54) DEVICE FOR DRILLING THROUGH A FORMATION

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See application file for complete search history.

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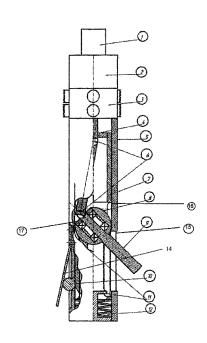
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(57) ABSTRACT

In order to reduce the risk of accidents in mechanically drilling through a stratum and to expand the range of applications of the device for drilling through a stratum, the invention provides that the control elements—which ensure the infeeding of the cutting rod and the return of the device to the position for being transported by means of interacting the ball-and-socket joint with the control bushing and the body—are embodied as two-stage figure projections on the lateral truncations of the ball-and-socket joint, which cooperate with cutouts in the control bushing and the body; and the line of pipes and the hydraulic motor of the suspension and of the pivot point are optionally replaced by a cable and by an electric motor combined with a hydraulic pump.

8 Claims, 2 Drawing Sheets



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